

The Examiner has rejected claim 15 under 35 U.S.C. § 112, second paragraph, asserting that claim 15 is vague, indefinite and confusing in the use of the recitations "said biogenous substance being the biomass itself of a substance extracted from the biomass." Applicant submits that claim 15 as amended no longer recites the phrase to which the Examiner has objected. Applicants respectfully request that the rejection be withdrawn.

Rejection of claim 15

The Examiner has rejected claim 15 under 35 U.S.C. § 112, asserting that the claim is confusing in the recitation of "harvesting . . . at an extraction rate of about 0.1 to about 12 times said volume per day", asserting that it is unclear that replacing 0.1 of the initial volume per day would constitute "continuous culture". Applicants respectfully disagree and submit that in light of the teachings of the specification, it is clear that replacing 0.1 of the initial volume per day may constitute a continuous culture. As the specification makes clear, the extraction rate depends on the growth rate of the ciliate strain. Thus, for slower growing strains replacing 0.1 of the initial volume per day may indeed constitute a continuous culture. See page 6, lines 4-9 and the working examples that immediately follow. Applicants respectfully request that the rejection be withdrawn.

Rejection of claim 26

The Examiner has rejected claim 26 under 35 U.S.C. § 112, asserting that the claim is vague and indefinite in the multiple and/or clauses recited. Applicants respectfully submit that the rejection is moot, as amended claim 26 no longer contains the rejected language. Withdrawal of the rejection is respectfully requested.

Rejection of claim 26

The Examiner has rejected claim 26 under 35 U.S.C. § 112, asserting that the claim is confusing in the recitation "the cells contained in the harvested biomass". Applicants respectfully submit that claim 26 has been amended as suggested by the Examiner. Withdrawal or the rejection is requested.

Objections under 37 C.F.R. § 1.75(c)

Objection to claim 27

The Examiner has objected to claim 27 as being of improper dependent form under 37 C.F.R. § 1.75 (c), asserting that claim 27 fails to further limit the subject matter of a previous claim. Applicants respectfully submit that the rejection may be withdrawn, as claim 27 has been amended to recite the additional step of extracting a biogenous substance from the produced biomass.

Objection to claim 16

The Examiner has objected to claim 16, asserting that it is unclear whether the limitation(s) following the phrase “including the orders...” and “which include...” are part of the claimed invention and that the nature of the wild-type strains, mutants and recombinants intended is unclear. Although Applicants respectfully submit that the claim is clear in the context of the specification, Applicants have amended claim 16 to remove the objected language. Applicants respectfully submit that the objection may be withdrawn.

Applicant believes that each stated ground for rejection has been addressed and that the Application is in condition for allowance. In the event that additional extensions of time are required, they are hereby requested. The Examiner is invited to contact the undersigned at (302) 888-6427 to clarify any remaining issues that may be present.

Kiy, T.
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If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 03-2775. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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By: 

Elliot C. Mendelson
Reg. No. 42,878
CONNOLLY BOVE LODGE & HUTZ LLP
1220 Market Street
P. O. Box 2207
Wilmington, DE 19899
(302) 658-9141

Attorneys for Applicant

EXHIBIT A

Please amend claims 15, 16, 23 and 25-27 to read as follows:

15 [Amended twice]. A continuous fermentation process, comprising:

- (i) continuously cultivating ciliates in a volume of complex axenic aqueous culture medium to produce a biomass of ciliate cells containing a biogenous substance[, said biogenous substance being the biomass itself or a substance extracted from the biomass];
- (ii) harvesting said culture medium containing the produced biomass at an extraction rate of about 0.1 to about 12 times said volume per day; and
- (iii) replacing the harvested culture medium containing the biomass with complex axenic aqueous culture medium, so as to maintain a continuous fermentation culture.

16 [Amended once]. The fermentation process as claimed in claim 15, wherein the ciliates belong to one of the taxonomic groups Holotricha, Peritricha, Spirotricha and Suctoria, [including the orders] Tetrahymena, Paramecium, Colpoda, Glaucoma, Parauronema, Engelmanniella, Stylonichia, Euplotes and Colpidium[, which include, in addition to the wild-type strains, also mutants and/or recombinants of these strains].

26 [Amended twice]. The fermentation process as claimed in claim 15, wherein the produced biomass is [cells contained in the harvested biomass are] separated off from the harvested culture medium by a method selected from the group consisting of centrifugation, tangential filtration, microfiltration, sedimentation and flotation [centrifugation and/or tangential filtration and/or microfiltration and/or sedimentation and/or flotation].

27 [Amended twice]. The fermentation process as claimed in claim 15 additionally comprising the step of extracting [,wherein the ciliate biomass comprises] a biogenous substance selected from the group consisting of: peptides, proteins, enzymes, fatty acids, lipids, polysaccharides, nucleic acids, secondary metabolites and polymers from the produced biomass.